rates in grams per hour based on either fuel flow, fuel flow and engine intake air flow, or exhaust volume flow. Weighted emission rates are reported as grams per brake-kilowatt hour (g/kW-hr). See subpart E of this part for a complete description of the test procedure.

(c) Additional information about system design, calibration methodologies, and so forth, for raw gas sampling can be found in part 86, subpart D of this chapter. Examples for system design, calibration methodologies, and so forth, for dilute exhaust gas sampling can be found in part 86, subpart N of this chapter.

(d) For Phase 2 Class I, Phase 2 Class I-B, and Phase 2 Class II natural gas fueled engines, the following sections from 40 CFR Part 86 are applicable to this subpart. The requirements of the following sections from 40 CFR Part 86 which pertain specifically to the measurement and calculation of non-methane hydrocarbon (NMHC) exhaust emissions from otto cycle heavy-duty engines must be followed when determining the NMHC exhaust emissions from Phase 2 Class I, Phase 2 Class I–B, and Phase 2 Class II natural gas fueled engines. Those sections are: 40 CFR 86.1306–90 Equipment required and specifications; overview, 40 CFR 86.1309–90 Exhaust gas sampling system; otto-cycle engines, 40 CFR 86.1311–94 Exhaust gas analytical system; CVS bag sampling, 40 CFR 86.1313–94(e) Fuel Specification—Natural gas-fuel, 40 CFR 86.1314–94 Analytical gases, 40 CFR 86.1316–94 Calibrations; frequency and overview, 40 CFR 86.1321–94 Hydrocarbon analyzer calibration, 40 CFR 86.1325–94 Methane analyzer calibration, 40 CFR 86.1327–94 Engine dynamometer test procedures, overview, 40 CFR 86.1340–94 Exhaust sample analysis, 40 CFR 86.1342–94 Calculations; exhaust emissions, 40 CFR 86.1344–94(d) Required information—Pre-test data, 40 CFR 86.1344–94(e) Required information—Test data.

[60 FR 34598, July 3, 1995, as amended at 64 FR 15243, Mar. 30, 1999; 65 FR 24312, Apr. 25, 2000]

§ 90.302 Definitions.

The definitions in § 90.3 apply to this subpart. The following definitions also apply to this subpart.

Intermediate speed means the engine speed which is 85 percent of the rated speed.

Natural gas means a fuel whose primary constituent is methane.

Rated speed means the speed at which the manufacturer specifies the maximum rated power of an engine.

[64 FR 15243, Mar. 30, 1999]

§ 90.303 Symbols, acronyms, abbreviations.

(a) The acronyms and abbreviations in § 90.5 apply to this subpart.

(b) The symbols in Table 1 in Appendix A of this subpart apply to this subpart.

§ 90.304 Test equipment overview.

(a) All engines subject to this subpart are tested for exhaust emissions. Engines are operated on dynamometers meeting the specification given in § 90.305.

(b) The exhaust is tested for gaseous emissions using a raw gas sampling system as described in § 90.414 or a constant volume sampling (CVS) system as described in § 90.421. Both systems require analyzers (see paragraph (c) of this section) specific to the pollutant being measured.

(c) Analyzers used are a non-dispersive infrared (NDIR) absorption type for carbon monoxide and carbon dioxide analysis; paramagnetic (PMD), zirconia (ZRDO), or electrochemical type (ECS) for oxygen analysis; a flame ionization (FID) or heated flame ionization (HFID) type for hydrocarbon analysis; and a chemiluminescent detector (CLD) or heated chemiluminescent detector (HCLD) for oxides of nitrogen analysis.

§ 90.305 Dynamometer specifications and calibration accuracy.

(a) *Dynamometer specifications.* The dynamometer test stand and other instruments for measurement of speed